

ABSTRACT OF THE DISCLOSURE

Capacitors (4, 6) are connected in series across a DC power supply (2). IGBTs (8, 10) are connected in series across the DC power supply (2), too.

5 The IGBTs (8, 10) are rendered conductive alternately. A transformer (12) is connected between the junction of the capacitors (4, 6) and the junction of the IGBTs (8, 10). Snubber capacitors (32, 38) are connected in parallel with the IGBTs (8, 10), respectively. Diodes (34, 40) are connected in series with

10 respective ones of the snubber capacitors (32, 38) in such a manner that said snubber capacitors (32, 38) can be charged when the IGBTs (8, 10) are rendered nonconductive. A secondary winding (54SA) of a transformer (54) is connected between the DC power supply (2) and the junction of the snubber capacitor (32) and the diode (34), and converts a secondary voltage of the transformer (12) and returns the converted voltage to the DC power supply (2) when the IGBT (8)

15 is conductive. A secondary winding (54SB) of the transformer (54) is connected between the DC power supply (2) and the junction of the snubber capacitor (38) and the diode (40), and converts a secondary voltage of the transformer (12) and returns the converted voltage to the DC power supply (2) when the IGBT (10) is conductive.